

RELEASE NOTIFICATION REQUIREMENTS IN MICHIGAN

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Michigan
SARA Title III
Program
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RELEASE NOTIFICATION REQUIREMENTS

TABLE 11/17/2014

www.michigan.gov/chemrelease

- *WHAT*
- *WHEN*
- *TO WHOM &*
- *HOW*

releases must be reported in State &
Federal Regulations that apply in Michigan.

Delete this from your table

Fire Prevention Code

1941 PA 207

**Part 2 of Storage and Handling of
Flammable and Combustible Liquids rules
(FL/CL code)**

Revise this on your table

4

**MIOSHA
1974 PA 154
Section 61, Records & Reports; Notice of
Fatalities or Hospitalization**

**A release that results in a fatality within 30 days
of the incident or in-patient hospitalization within
24 hours of the incident.**

MIOSHA – Initial Notification

5

**Within 8 hours:
for a fatality
or
Within 24 hours:
for hospitalization
to MIOSHA Hotline
by
Employer.**

WHAT IS A RELEASE?

SPILL

LEAK

PUMP

POUR

EMIT

EMPTY

DISCHARGE

INJECT

ESCAPE

LEACH

DUMP

DISPOSE



ACT & REGULATION

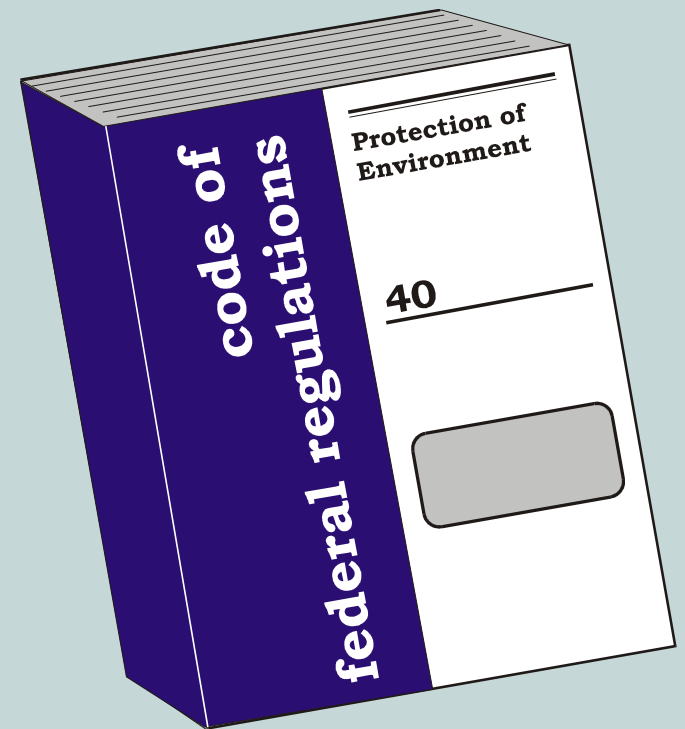
➤ FEDERAL = CFR

Code of Federal Regulations

➤ STATE = PA

Public Act

➤ OTHER REQUIREMENTS



REPORTING CRITERIA

SUBSTANCE

AMOUNT

MEDIUM

IMPACT

SOURCE



SARA Title III Section 304

Reporting Criteria

Release of

- **CERCLA** Hazardous substance
- **Extremely Hazardous Substance (EHS)**



EPA'S LIST OF LISTS

➤ **CERCLA - Hazardous**

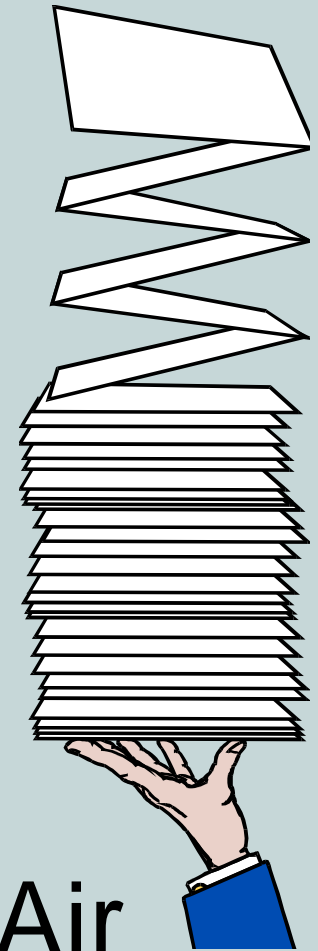
➤ **SARA Title III**

EHS

Toxic (section 313)

➤ **CAA - Extremely Hazardous Air
Pollutant - section 112(r)**

Updated Oct 2012



EPA'S LIST OF LISTS

NAME	CAS/313 Category Codes	Section 302 (EHS) TPQ	Section 304 EHS RQ	CERCLA RQ	Section 313	RCRA CODE	CAA 112(r) TQ
HCFC-142b	75-68-3				X		
CFC-11	75-69-4			5,000	X	U121	
Trichlorofluoromethane	75-69-4			5,000	313	U121	
Trichloromonofluoromethane	75-69-4			5,000	X	U121	
CFC-12	75-71-8			5,000	X	U075	
Dichlorodifluoromethane	75-71-8			5,000	313	U075	
CFC-13	75-72-9				X		
Chlorotrifluoromethane	75-72-9				313		
Plumbane, tetramethyl-	75-74-1	100	100				10,000
Tetramethyllead	75-74-1	100	100		313c		10,000
Silane, tetramethyl-	75-76-3						10,000
Tetramethylsilane	75-76-3						10,000
Silane, chlorotrimethyl-	75-77-4	1,000	1,000				10,000
Trimethylchlorosilane	75-77-4	1,000	1,000				10,000
Dimethyldichlorosilane	75-78-5	500	500				5,000
Silane, dichlorodimethyl-	75-78-5	500	500				5,000
Methyltrichlorosilane	75-79-6	500	500				5,000

LIST OF LISTS

- CAS = Chemical Abstracts Service number
- EHS = Extremely Hazardous Substance
- TPQ = Threshold Planning Quantity
- *RQ = Reportable Quantity*
- CAA = Clean Air Act
- TQ = Threshold Quantity
- *Amounts in POUNDS*

GALLONS TO POUNDS FORMULA FOR CONVERSION

13

Gallons of Substance

X

Weight of Water (8.34 lbs per gal)

X

Specific Gravity (Relative Density) from MSDS

=

Pounds of Substance



CONVERSION EXAMPLE

14

1000 gallons of Gasoline

X

Weight of water 8.34 lb/gal

X

Specific gravity from SDS 0.72 - 0.75

=

6255 pounds of Gasoline

LIST OF LISTS

Look up:

Ammonia

CAS =

7664-41-7



LIST OF LISTS

Ammonia

Section 302 (EHS) TPQ = **500**

Section 304 EHS RQ = **100**

CERCLA RQ = **100**

Section 313 = **313**

RCRA Code = **none**

CAA 112(r) TQ = **none**
10,000 if anhydrous

CHEMICAL LISTS - STATE

- NREPA Part 31

Water Resources Protection

- Part 5 Rules

Spillage of Oil & Polluting Materials

- Table 1: Polluting Materials

TRQ = Threshold Reporting Quantity

PART 5 RULES

POLLUTING MATERIALS

APPENDIX C: NREPA Part 31 - Part 5 Rules

Name	CAS	TRQ (lbs.)
Tris(2,3-dibromopropyl) phosphate	126727	10
Methacrylonitrile	126987	100
Chloroprene	126998	10
Tetrachloroethylene	127184	10
Zinc phenolsulfonate	127822	500
Potassium dimethyldithiocarbamate	128030	1
Sodium dimethyldithiocarbamate	128041	1
Pyrene	129000	500
Warfarin sodium	129066	10
2-methyl-1-nitroanthraquinone	129157	10
1,4-Naphthoquinone	130154	500
Dimethyl phthalate	131113	500
Ammonium picrate	131748	10
2-Cyclohexyl-4,6-dinitrophenol	131895	10
sodium-o-phenylphenol	132274	10
3-amino-9-ethylcarbazole	132321	10
Dibenzofuran	132649	10

Name	CAS	TRQ (lbs.)
p-nitrosodiphenylamine	156105	10
1,2-Dichloroethylene	156605	100
Calcium cyanamide	156627	100
Dibenz[a,i]pyrene	189559	10
Benzo[ghi]perylene	191242	500
Indeno(1,2,3-cd)pyrene	193395	10
Benzo[b]fluoranthene	205992	1
Fluoranthene	206440	10
Benzo(k)fluoranthene	207089	500
Acenaphthylene	208968	500
Chrysene	218019	10
Benz[c]acridine	225514	10
O,O-Diethyl O-pyrazinyl phosphorothioate	297972	10
Methyl parathion	298000	10
Phorate	298022	10
Disulfoton	298044	1
1,2:3,4-diepoxybutane	298180	10
Naled	300765	10

POLLUTING MATERIALS LIST

Look up: Ammonia

TRQ = 10 lbs

EXAMPLE 1

Ammonia Release

**WHEN IS A
RELEASE OF
AMMONIA
SUBJECT TO
REPORTING?**



SARA Title III

Section 304

Ammonia Release

- **CERCLA** Hazardous substance
- Extremely Hazardous Substance (**EHS**)

100 lbs Ammonia released to the environment that migrates beyond facility boundaries.

REGULATIONS THAT REFERENCE CERCLA

SARA Title III sect 304

CERCLA sect 103

NREPA Part 201

49 CFR 171 (Transportation)

CWA sect 311, 33 CFR 153

NREPA Parts 211 & 213

REPORTING CRITERIA

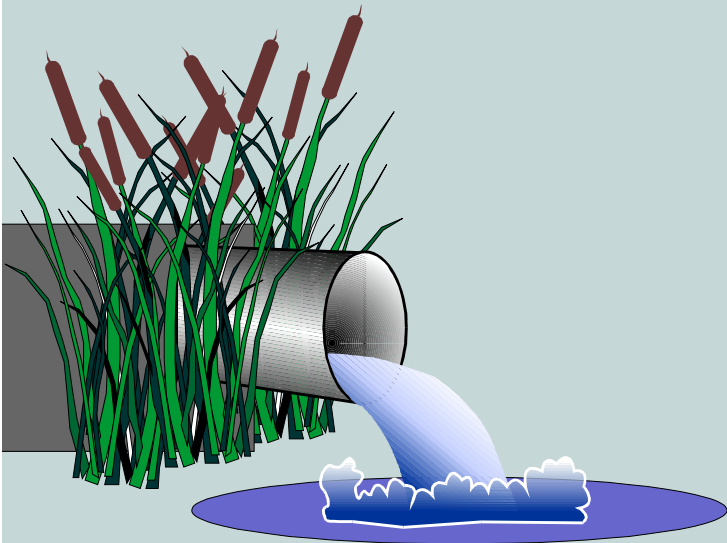
A SINGLE RELEASE MIGHT **BE
REPORTABLE ENFORCEABLE**)
UNDER MULTIPLE REGULATIONS.



NREPA Part 31

Ammonia Release

Polluting Materials (Part 5 Rules, Table 1)
10 lbs Ammonia released to water
or sewage system



REPORTING CRITERIA

- DIFFERENT REGULATIONS CAN HAVE DIFFERENT REPORTABLE QUANTITIES FOR THE SAME CHEMICAL.



INITIAL NOTIFICATION – WHEN ?

IMMEDIATE (W/I 15 MINS)

WITHIN 24 HOURS

WITHIN 30 DAYS

AS SOON AS PRACTICAL

AS SOON AS PRACTICABLE

PROMPTLY

AS SOON AS POSSIBLE

WITHIN 8 HOURS

EARLIEST PRACTICABLE MOMENT

INITIAL NOTIFICATION

** Worst Case **

**IMMEDIATE
MEANS
WITHIN 15 MINUTES
AFTER
DISCOVERY OF THE
RELEASE**

INITIAL NOTIFICATION – TO WHOM ?

LEPC

SERC

911

PEAS

NRC

DEQ-RRD (AND OTHER
DIVISIONS)

MDARD

LARA

BOTTOM LINE

If there is a release, **IMMEDIATELY** notify:

- **LOCAL** – 911
- **STATE** – PEAS
- **FEDERAL** – NRC



Then assess the situation and make additional notifications as required.

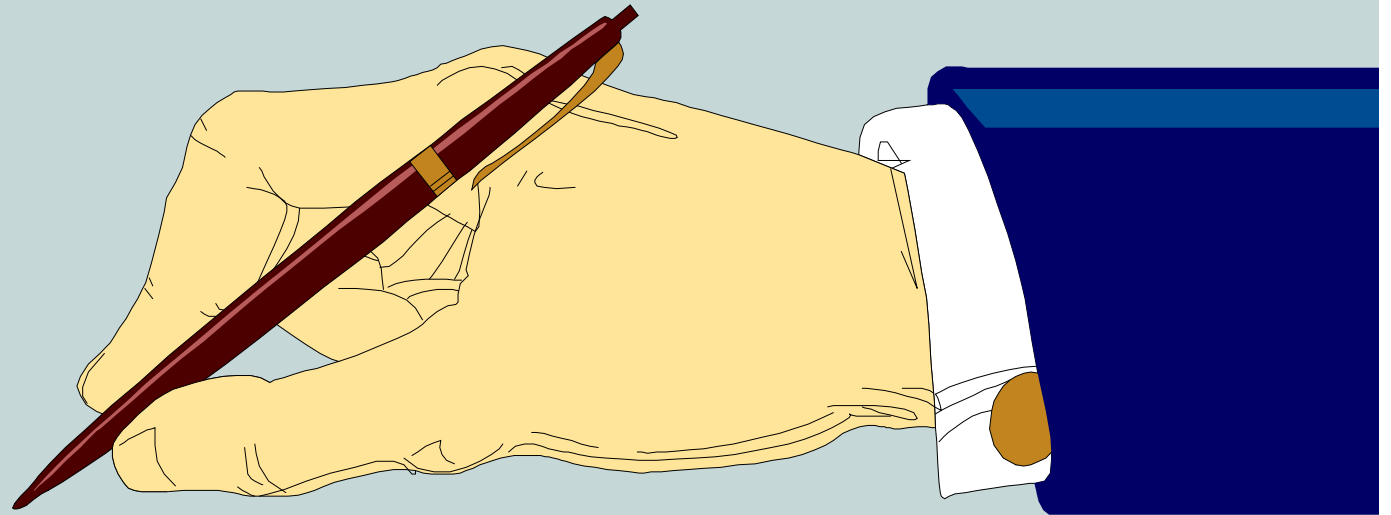
REMEMBER TO KISS !

THERE ARE NO
PENALTIES
FOR OVER-
REPORTING !



INITIAL NOTIFICATION

DOCUMENT IT



WRITTEN FOLLOW-UP REPORT

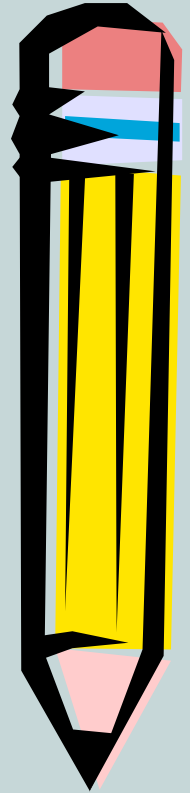
REQUIRED BY REGULATION

- Specified Form
- Specified Information

DEQ general form:

“Spill or Release Report”

Also use to document initial notification



WRITTEN FOLLOW-UP REPORT

AS SOON AS ³³ PRACTICABLE
MEANS

WITHIN 30 DAYS

AFTER

DISCOVERY OF THE RELEASE

NOTES

PHONE NUMBERS
CONTACTS



EXAMPLE 2

A textile company had a release of 860 gallons of sodium hydroxide solution to the soil. Of this, 15% reached the river.

The SDS is in your handouts.



EXAMPLE 2

1.a. Notify

- ✦ 911
- ✦ PEAS
- ✦ NRC

1.b. Respond

2. Follow-up

- ✦ Investigate
- ✦ Calculate
- ✦ Report



EXAMPLE 2

Calculate Release

- 1.** Identify the hazardous ingredients and weight % in the sodium hydroxide solution.
- 2.** Calculate the weight of the released sodium hydroxide solution.
- 3.** Calculate the weight of the released hazardous ingredients.
- 4.** Compare to Reportable Quantity (RQ). (The RQ depends on the regulation.)

1. Identify hazardous ingredients
and weight %
in sodium hydroxide solution

Sodium Hydroxide

CAS = **1310-73-2**

Weight % = **50%** (**0.5**)



2. How many pounds of sodium hydroxide solution were released to the soil?

860 gal of NaOH Solution

X

Weight of Water: 8.34 lbs/gal

X

Specific gravity on SDS: 1.52

=

NaOH Solution Released: 10902 lbs

3(a). How many pounds of sodium hydroxide were released to the soil?

$$\begin{array}{rcl} \underline{10902 \text{ lbs}} & \text{NaOH solution} & \\ \times & & \\ \underline{0.5 \text{ or } 50\%} & \text{NaOH concentration} & \\ = & & \\ \underline{5451 \text{ lbs}} & \text{NaOH} & \end{array}$$



3(b). How many pounds of sodium hydroxide reached the river?

5451 lbs NaOH released to soil

X

0.15 or 15 % reached the river

=

817.7 lbs NaOH reached the river

4. Compare to the RQ

Sodium Hydroxide

CAS No. = 1310-73-2

Released to soil = 5451 lbs

Released to river = 818 lbs

CERCLA RQ = 1000 lbs

SARA EHS RQ = none

SARA Toxic? no

Part 5 Rules TRQ = 100 lbs

5. What regulations apply to this release of sodium hydroxide solution?

- SARA sect 304
- CERCLA sect 103
- NREPA Part 201
- Fire Prevention Code sect 29.5g
- NREPA Part 31, Part 5 Rules

EXAMPLE 2

Post script

This company reported the release 2 days after it was discovered. The proposed penalty for late reporting and violating the NPDES permit requirements was \$38,540.

IMPORTANT !

**ALL RELEASES
MUST BE
CLEANED UP**
– even if not
reportable.



Test 1

Taken from actual situation reports to the NRC

9:30 a.m.

Pure sulfuric acid is leaking from a tank onto the ground at a rate of about 1 ton per hour.



Test 1

1. Who should you call?

- 911
- PEAS
- NRC

Test 1

4 p.m.

200 gallons of sulfuric acid leaked from a tank onto the ground. Leak was contained and no waterways were affected.



Test 1

2. How many pounds of sulfuric acid were released to the ground?

200 gal of Sulfuric Acid

X

Weight of water: 8.34 lbs/gal

X

Specific Gravity on SDS: 1.84

=

Sulfuric Acid Released: 3069 lbs

Test 1

3. Complete the following for Sulfuric Acid

CAS No. = 7664-93-9

CERCLA RQ = 1000 lbs

SARA EHS RQ = 1000 lbs

SARA Toxic? No

Part 5 Rules TRQ = 100 lbs

Test 1

4. What regulations apply?

(not SARA Title III section 304 because release did not migrate beyond facility boundaries)

- CERCLA section 103
- NREPA part 201
- Fire Prevention Code sect 29.5g
- NREPA Part 31, Part 5 Rules

Test 2

A fuel truck was offloading gasoline into an AST. There was a leak in the hose and gasoline was flowing off the property toward a wetland. While the hose was being disconnected from the AST, a static spark ignited the gasoline. About 100 gallons of gasoline were released.

Test 2

1. Who should you call?

- 911
- PEAS
- NRC

Test 2

2. How many pounds of gasoline were released to the ground?

100 gal of Gasoline

x

Weight of water: 8.34 lbs/gal

x

Specific Gravity on SDS: 0.75

=

Gasoline Released: 626 lbs

Test 2

3. How many pounds of benzene were released to the ground?

626 lbs Gasoline

x

5% (0.05) benzene

=

31 lbs benzene

Test 2

4. What is the CERCLA RQ for benzene?

10 lbs

Test 2

5. What regulations apply?

- NREPA Part 201
- Fire Prevention Code Sect 29.5g
- 49 CFR 171

Test 2

6. Why is this release not reportable under SARA Title III sect 304 or CERCLA sect 103?

The petroleum exclusion (intro to the release reporting table)

Test 2

7. Why is this release not reportable under the Part 5 Rules?

Part 5 Rules have a conditional exemption (Rule 3[1][c]) for flammable and combustible liquids that are subject to the fire prevention code (1941 PA 207).